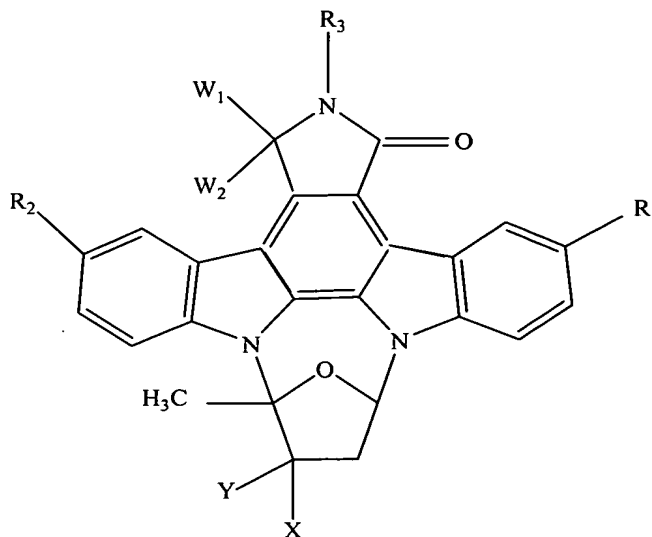


This listing of claims will replace all prior versions, and listings, of claims in the application.

*Listing of Claims*

1. (*currently amended*) A compound ~~defined by the general~~ of formula (I):



wherein:

one of  $R^1$  and  $R^2$  is selected from the group consisting of:

a)  $-\text{CO}(\text{CH}_2)_j\text{R}^4$ , wherein  $j$  is 1 to 6, and  $\text{R}^4$  is selected from the group consisting of:

1) ~~hydrogen and a~~ halogen;

2)  $-\text{NR}^5\text{R}^6$ , wherein  $\text{R}^5$  and  $\text{R}^6$  independently are hydrogen, substituted lower alkyl, unsubstituted lower alkyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted heteroaryl, substituted aralkyl, unsubstituted aralkyl, lower alkylaminocarbonyl, or lower alkoxy carbonyl; or  $\text{R}^5$  and  $\text{R}^6$  are combined with ~~a~~ the nitrogen atom to which they are attached to form a heterocyclic group;

3)  $\text{N}_3$ ;

4)  $-\text{SR}^{27}$ , wherein  $\text{R}^{27}$  is selected from the group consisting of:

i) hydrogen;

ii) substituted lower alkyl;

- iii) unsubstituted lower alkyl;
- iv) substituted aryl;
- v) unsubstituted aryl;
- vi) substituted heteroaryl;
- vii) unsubstituted heteroaryl;
- viii) substituted aralkyl;
- ix) unsubstituted aralkyl;
- x) thiazoliny;
- xi)  $-(CH_2)_aCO_2R^{28}$ , wherein a is 1 or 2, and  $R^{28}$  is selected

from the group consisting of: hydrogen and lower alkyl; and

- xii)  $-(CH_2)_aCONR^5R^6$ ; and

5)  $OR^{29}$  (wherein  $R^{29}$  is hydrogen, substituted lower alkyl, unsubstituted lower alkyl, or  $CO_2R^{30}$  (wherein  $R^{30}$  is hydrogen, lower alkyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, or unsubstituted heteroaryl));

b)  $-CH(OH)(CH_2)_bR^{4A}$ , wherein b is 1 to 6 and  $R^{4A}$  is hydrogen or the same as  $R^4$ ;

c)  $-(CH_2)_dCHR^{31}CO_2R^{32}$ , wherein d is 0 to 5,  $R^{31}$  is hydrogen,  $-CONR^5R^6$ , or  $CO_2R^{33}$  (wherein  $R^{33}$  is hydrogen or lower alkyl), and  $R^{32}$  is hydrogen or lower alkyl;

d)  $-(CH_2)_dCHR^{31}CONR^5R^6$ ;

e)  $-(CH_2)_kR^7$ , wherein k is 2 to 6, and  $R^7$  is halogen,  $CO_2R^8$  (wherein  $R^8$  is hydrogen, lower alkyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, or unsubstituted heteroaryl),  $CONR^5R^6$ , substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted heteroaryl,  $OR^9$  (wherein  $R^9$  is hydrogen, substituted lower alkyl, unsubstituted lower alkyl, acyl, substituted aryl, or unsubstituted aryl),  $SR^{27B}$  (wherein  $R^{27B}$  is the same as  $R^{27}$ ),  $NR^{10}R^{11}$  (wherein  $R^{10}$  and  $R^{11}$  are the same as  $R^5$  and  $R^6$ ) or  $N_3$ ;

f)  $-CH=CH(CH_2)_mR^{12}$  wherein m is 0 to 4, and  $R^{12}$  is hydrogen, lower alkyl,  $CO_2R^{8A}$  (wherein  $R^{8A}$  is the same as  $R^8$ ),  $-CONR^5R^6$ , substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted heteroaryl,  $OR^{9A}$  (wherein  $R^{9A}$  is the same as  $R^9$ ), or  $NR^{10A}R^{11A}$  (wherein  $R^{10A}$  and  $R^{11A}$  are the same as  $R^5$  and  $R^6$ );

g)  $-CH-C(CO_2R^{33A})_2$ , wherein  $R^{33A}$  is the same as  $R^{33}$ ;

h)  $-C\equiv C(CH_2)_nR^{13}$ , wherein n is 0 to 4, and  $R^{13}$  is the same as  $R^{12}$ ;

- i)  $-\text{CH}_2\text{OR}^{44}$ , wherein  $\text{R}^{44}$  is substituted lower alkyl;  
and the other of  $\text{R}^1$  or  $\text{R}^2$  is selected from the group consisting of
- j) hydrogen, lower alkyl, halogen, acyl, nitro,  $\text{NR}^{14}\text{R}^{15}$  (wherein  $\text{R}^{14}$  or  $\text{R}^{15}$  is hydrogen or lower alkyl, and the other is hydrogen, lower alkyl, acyl, carbamoyl, lower alkylaminocarbonyl, substituted arylaminocarbonyl or unsubstituted arylaminocarbonyl);
- k)  $-\text{CH}(\text{SR}^{34})_2$ , wherein  $\text{R}^{34}$  is lower alkyl or alkylene;
- l)  $-\text{CH}_2\text{R}^{35}$ , wherein  $\text{R}^{35}$  is  $\text{OR}^{36}$  (wherein  $\text{R}^{36}$  is tri-lower alkyl silyl in which the three lower alkyl groups are the same or different, or is the same as  $\text{R}^{29}$ ), or  $\text{SR}^{37}$  (wherein  $\text{R}^{37}$  is the same as  $\text{R}^{27}$ );
- m)  $-\text{CO}(\text{CH}_2)_q\text{R}^{16}$ , wherein  $q$  is 1 to 6, and  $\text{R}^{16}$  is the same as  $\text{R}^4$ ;
- n)  $-\text{CH}(\text{OH})(\text{CH}_2)_e\text{R}^{38}$ , wherein  $e$  is 1 to 6, and  $\text{R}^{38}$  is the same as  $\text{R}^{4A}$ ;
- o)  $-(\text{CH}_2)_f\text{CHR}^{39}\text{CO}_2\text{R}^{40}$ , wherein  $f$  is 0 to 5,  $\text{R}^{39}$  is the same as  $\text{R}^{31}$  and  $\text{R}^{40}$  is the same as  $\text{R}^{32}$ ;
- p)  $-(\text{CH}_2)_r\text{R}^{17}$ , wherein  $r$  is 2 to 6, and  $\text{R}^{17}$  is the same as  $\text{R}^7$ ;
- q)  $-\text{CH}=\text{CH}(\text{CH}_2)_t\text{R}^{18}$ , wherein  $t$  is 0 to 4, and  $\text{R}^{18}$  is the same as  $\text{R}^{12}$ ;
- r)  $-\text{CH}=\text{C}(\text{CO}_2\text{R}^{33B})_2$ , wherein  $\text{R}^{33B}$  is the same as  $\text{R}^{33}$ ;
- s)  $-\text{C}\equiv\text{C}(\text{CH}_2)_u\text{R}^{19}$ , wherein  $u$  is 0 to 4, and  $\text{R}^{19}$  is the same as  $\text{R}^{13}$ ;

$\text{R}^3$  is hydrogen, acyl, or lower alkyl;

X is selected from the group consisting of:

- a) hydrogen;
- b) formyl;
- c) lower alkoxy carbonyl;
- d)  $-\text{CONR}^{20}\text{R}^{21}$ , wherein:  
 $\text{R}^{20}$  and  $\text{R}^{21}$  independently are:

hydrogen;

lower alkyl;

$-\text{CH}_2\text{R}^{22}$ , wherein  $\text{R}^{22}$  is hydroxy, or

$-\text{NR}^{23}\text{R}^{24}$  (wherein  $\text{R}^{23}$  or  $\text{R}^{24}$  is hydrogen or lower alkyl, and

the other is hydrogen, lower alkyl, or the residue of an  $\alpha$ -amino acid in which the hydroxy group of the carboxyl group is excluded, or  $\text{R}^{23}$  and  $\text{R}^{24}$  are combined with **a the** nitrogen atom **to which they are attached** to form a heterocyclic group); and

e)  $-\text{CH}=\text{N}-\text{R}^{25}$ , wherein  $\text{R}^{25}$  is hydroxy, lower alkoxy, amino, guanidino, or imidazolylamino;

Y is hydroxy, lower alkoxy, aralkyloxy, or acyloxy; or

X and Y combined represent,  $-\text{X}-\text{Y}-$ ,  $=\text{O}$ ,  $-\text{CH}_2\text{O}(\text{C}=\text{O})\text{O}-$ ,  $-\text{CH}_2\text{OC}(=\text{S})\text{O}-$ ,  $-\text{CH}_2\text{NR}^{26}\text{C}(=\text{O})-$  (wherein  $\text{R}^{26}$  is hydrogen or lower alkyl),  $-\text{CH}_2\text{NHC}(=\text{S})\text{O}-$ ,  $-\text{CH}_2\text{OS}(=\text{O})\text{O}-$ , or  $-\text{CH}_2\text{OC}(\text{CH}_3)_2\text{O}-$ ; and

$\text{W}^1$  and  $\text{W}^2$  are hydrogen, or  $\text{W}^1$  and  $\text{W}^2$  together represent oxygen;  
or a pharmaceutically acceptable salt thereof.

2. (*original*) The compound of claim 1 wherein:

A2 a) one of  $\text{R}^1$  and  $\text{R}^2$  is selected from the group consisting of  $-(\text{CH}_2)_k\text{R}^7$ ,  $-\text{CH}=\text{CH}(\text{CH}_2)_m\text{R}^{12}$ ,  $-\text{C}\equiv\text{C}(\text{CH}_2)_n\text{R}^{13}$ ,  $-\text{CO}(\text{CH}_2)_j\text{SR}^{27}$  and  $-\text{CH}_2\text{OR}^{44}$ , wherein  $\text{R}^{44}$  is methoxymethyl, ethoxymethyl, or methoxyethyl;

and the other of  $\text{R}^1$  and  $\text{R}^2$  is selected from the group consisting of  $-(\text{CH}_2)_r\text{R}^{17}$ ,  $-\text{CH}=\text{CH}(\text{CH}_2)_i\text{R}^{18}$ ,  $-\text{C}=\text{C}(\text{CH}_2)_u\text{R}^{19}$ ,  $\text{NR}^{14}\text{R}^{15}$ , hydrogen, halogen, nitro,  $-\text{CH}_2\text{O}$ , substituted lower alkyl, unsubstituted lower alkyl,  $-\text{CO}(\text{CH}_2)_q\text{SR}^{27}$ ,  $-\text{CH}_2\text{R}^{35}$ , wherein  $\text{R}^{35}$  is  $\text{OR}^{36}$ , and  $-\text{CH}_2\text{SR}^{37}$ , wherein  $\text{R}^{37}$  is selected from the group consisting of lower alkyl, pyridyl, and benzimidazole;

b) k and r are each 2, 3, or 4;

c) j and q are each 1 or 2;

d)  $\text{R}^7$  and  $\text{R}^{17}$  are:

1) selected independently from the group consisting of: phenyl, pyridyl, imidazolyl, thiazolyl, or tetrazolyl; or

2) selected pairwise, from the group consisting of:

i)  $-\text{CO}_2\text{R}^8$  and  $\text{CO}_2\text{R}^{8A}$ , where  $\text{R}^8$  and  $\text{R}^{8A}$ , independently, are hydrogen, methyl, ethyl, or phenyl;

ii)  $-\text{OR}^9$  and  $-\text{OR}^{9A}$ , where  $\text{R}^9$  and  $\text{R}^{9A}$ , independently, are hydrogen, methyl, ethyl, phenyl, or acyl;

iii)  $-\text{SR}^{27B}$ , where  $\text{R}^{27B}$  is selected from the group consisting of unsubstituted lower alkyl, 2-thiazoline, and pyridyl; and

iv)  $-\text{NR}^{10}\text{R}^{11}$  and  $-\text{NR}^{14}\text{R}^{15}$ , where  $\text{R}^{10}$ ,  $\text{R}^{11}$ ,  $\text{R}^{14}$ , and  $\text{R}^{15}$ ,

independently, are selected from the group consisting of hydrogen, methyl, ethyl, phenyl, carbamoyl, and lower alkylaminocarbonyl;

e)  $R^{27}$  is selected from the group consisting of substituted lower alkyl, unsubstituted lower alkyl, substituted phenyl, unsubstituted phenyl, pyridyl, pyrimidinyl, thiazole, and tetrazole;

f)  $R^{36}$  is selected from the group consisting of methoxymethyl, ethoxymethyl, and methoxyethyl;

g) m, n, t and u each is 0 or 1; and

h)  $R^{12}$ ,  $R^{13}$ ,  $R^{18}$ , and  $R^{19}$  are independently selected from the group consisting of hydrogen, methyl ethyl, phenyl, pyridyl, imidazole, thiazole, tetrazole,  $-\text{CO}_2R^8$ ,  $-\text{OR}^9$ , and  $\text{NR}^{10}R^{11}$ , wherein  $R^8$ ,  $R^9$ ,  $R^{10}$ , and  $R^{11}$  each is hydrogen, methyl, ethyl, or phenyl.

3. *(original)* The compound of claim 2, wherein  $R^3$  is hydrogen or acetyl, X is hydroxymethyl or lower alkoxy carbonyl, Y is hydroxy or acetyloxy, and  $W^1$  and  $W^2$  are hydrogen.

4. *(original)* The compound of claim 3, wherein X is methoxycarbonyl, Y is hydroxy, and  $R^3$  is hydrogen.

5. *(currently amended)* The compound of claim 3 wherein:

one of  $R^1$  and  $R^2$  is selected from the group consisting of methoxycarbonylvinyl, ethoxycarbonylvinyl, styryl, 2-pyridylvinyl, 4-pyridylvinyl, 2-pyridylethyl, 4-pyridylethyl, phenylethyl, methoxypropynyl, hydroxypropynyl,  $-\text{COCH}_2\text{SEt}$ ,  $-\text{C}\equiv\text{CCH}_2\text{NMeBn}$ ,  $-\text{CH}=\text{CH}\text{Et}$ ,  $-(\text{CH}_2)_2\text{SMe}$ ,  $-(\text{CH}_2)_2\text{S-2-thiazoline}$ ,  $-(\text{CH}_2)_3\text{SMe}$ ,  ~~$-\text{CH}=\text{CH}\text{Et}$~~ ,  $-\text{CH}=\text{CH-2-imidazole}$ ,  $(\text{CH}_2)_2\text{OC(=O)H}$ , methoxymethoxymethyl, ethoxymethoxymethyl, methoxyethoxymethyl, and 2-hydroxyethyl; and

the other of  $R^1$  and  $R^2$  is selected from the group consisting of hydrogen, halogen, methoxycarbonylvinyl, ethoxycarbonylvinyl, styryl, 2-pyridylvinyl, 4-pyridylvinyl, 2-pyridylethyl, 4-pyridylethyl, phenylethyl, nitro, amino, N-ethylurea, methoxypropynyl, hydroxypropynyl,  $-\text{COCH}_2\text{SEt}$ ,  $-\text{C}\equiv\text{CCH}_2\text{NMeBn}$ ,  $-\text{CH}=\text{CH}\text{Et}$ ,  $-(\text{CH}_2)_2\text{SMe}$ ,  $-(\text{CH}_2)_2\text{S-2-thiazoline}$ ,  $-(\text{CH}_2)_3\text{SMe}$ ,  $-\text{CH}_2\text{OMe}$ ,  $-\text{CH}_2\text{OEt}$ ,  $-\text{CH}_2\text{SEt}$ , pyridylthiomethyl,

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PATENT

*A2* -CH<sub>2</sub>S-2-benzimidazole, -CH=CHEt, -CH=CH-2-imidazole, -(CH<sub>2</sub>)<sub>2</sub>OC(=O)H,  
methoxymethoxymethyl, ethoxymethoxymethyl, methoxyethoxymethyl, and 2-hydroxyethyl.

Claims 6-22 (*canceled*)

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